

**DRAFT ZONING ARTICLE** \_\_\_\_  
(Two-thirds vote)

**AMATEUR RADIO TOWERS**

General notes:

1. Should "TOWER" be added to the glossary? (I assume the CAPITAL words are defined in a glossary somewhere)
2. I see from the current wording of section 3.10.3 that you have deleted the text that defines a height-to-distance setback. Good! Just a comment: Make sure there is no contradicting by-law with regards to height-to-distance setback for STRUCTURES. You don't want to have a situation where the new bylaw says you can have an 80' tower, but another bylaw says an 80' STRUCTURE must be 80' back from the line. If there is such, I would draft an exemption for towers. They are not 'habitable' structures. (I know, for example, Chelmsford specifically defines a 'Tall Structure' that is exempt).

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To see if the Town will vote to amend the zoning bylaw as follows:

A. Insert under section 3.8.3 – Accessory Uses permitted in any Zoning District, a new sub-section 3.8.3.6 as follows:

- 3.8.3.6 Not more than one Amateur Radio TOWER (see above) on a LOT, inclusive of all antennas, appurtenances, support STRUCTURES (what is this in relation to the tower?), anchors, and guy wires, subject to the following requirements:
- a) The Tower shall be owned and operated by an amateur radio operator who is licensed by the Federal Communications Commission (FCC).
  - b) The operator of the Tower or the owner of the LOT shall dismantle and remove the Tower within 60 days after the cessation of the FCC-licensed operator's ownership or tenancy, or the expiration or rescission of the operator's FCC license.
  - c) The Tower height shall not exceed eighty feet from ground level when fully extended, including all antennas and appurtenances.
  - d) A Tower is prohibited in the front yard of the principal BUILDING or BUILDINGS on the LOT as defined in section 5.2.4.
  - e) In Residential Districts, a Tower shall be set back at least 30 feet from all side and rear LOT lines regardless of the otherwise applicable yard requirements, except when:
    - i. The Tower, even when extended, does not exceed the maximum height limit for STRUCTURES; or
    - ii. The tower is directly attached to the side or rear of the principal BUILDING or BUILDINGS on the LOT.

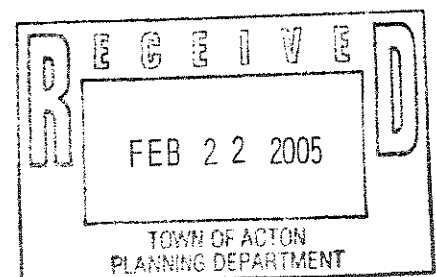
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Anchors and guys must in all cases only comply with the minimum side and rear yard requirements that are otherwise applicable to STRUCTURES. I disagree. You will often want to position an anchor as close as possible to the property line (to maximize the height you can fit), like a fence. I would apply whatever guidelines apply to fences and the like.

- f) The base of the Tower shall be surrounded by a fence with a locked gate or shall be equipped with an effective anti-climb device.

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g) No portion of the Tower shall be utilized as a sign or have signage attached to it.

h) No portion of the Tower shall be illuminated or have lights attached to it.

B. Delete section 3.10.3 – Applicability of Special Requirements for Wireless Communication Facilities, and replace it with a new section 3.10.3 as follows:

3.10.3 Applicability – This section 3.10 shall apply only to reception and transmission facilities for the purpose of personal wireless communication services identified in the Federal Telecommunications Act of 1996. Nothing in this Bylaw shall be construed to regulate or prohibit customary installations for the reception of wireless communication signals at home or business locations, and nothing in this Bylaw shall be construed to regulate or prohibit a tower or antenna installed solely for use by a federally licensed amateur radio operator. For regulations on Amateur Radio Towers see section 3.8.3.6 of this Bylaw.

*[Note: Section 3.10.3 currently states as follows:*

*3.10.3 Applicability – This section 3.10 shall apply only to reception and transmission facilities for the purpose of personal wireless communication services identified in the Federal Telecommunications Act of 1996. Nothing in this Bylaw shall be construed to regulate or prohibit customary installations for the reception of wireless communication signals at home or business locations, and nothing in this Bylaw shall be construed to regulate or prohibit an antenna installed solely for use by a federally licensed amateur radio operator, provided that the height of such antenna does not exceed applicable height limitations and, if freestanding, that it is set back from all LOT lines at least the distance equal to its height, but not less than the otherwise applicable minimum yard requirement see comment # 2.]*

Or take any other action relative thereto.

#### SUMMARY

Amateur radio operators, or “hams”, communicate with other stations nearby and all over the world. Federal and State government recognize hams for providing vital communications in the event of emergency or disaster. The ability to communicate both over long and short distances increases with the height of an antenna above the ground. A low antenna height can be partially compensated for by boosting power. High power stations with low antenna heights have an increased likelihood to interfere with neighbors’ telephones, televisions, VCRs, and audio equipment. Generally, one or more antennas are mounted to a support tower to achieve the desired height.

This article establishes standards for amateur radio transmission towers. Amateur radio towers would be limited to 80 feet in height including any top-mounted antennas, and their location would be limited to side and rear yards. In residential districts, a special 30-foot side and rear yard setbacks would be required for freestanding towers that exceed the otherwise applicable height limit.

Federal Communications Commission (FCC) regulations state: “... local regulations which involve placement, screening or height of antennas and antenna structures based on health, safety, or aesthetic considerations must be crafted to accommodate reasonably amateur communications, and to represent the minimum practical regulation to accomplish the local authority’s legitimate purpose” (47 C.F.R. §97.15(e)); and “a station antenna structure may be erected at heights and dimensions sufficient to accommodate amateur service communications. State and local regulations of a station antenna structure must not preclude amateur service communications. Rather, it must reasonably accommodate such communications and must constitute the minimum practicable regulation to accomplish the State or local authority’s legitimate purpose” (47 C.F.R. §97.15(b)).

Massachusetts General Law provides in Ch. 40A, S. 3 the following: "No zoning ordinance or by-law shall prohibit the construction or use of an antenna structure by a federally licensed amateur radio operator. Zoning ordinances and by-laws may reasonably regulate the location and height of such antenna structures for the purposes of health, safety, or aesthetics; provided, however, that such ordinances and by-laws reasonably allow for sufficient height of such antenna structures so as to effectively accommodate amateur radio communications by federally licensed amateur radio operators and constitute the minimum practicable regulation necessary to accomplish the legitimate purposes of the city or town enacting such ordinance or by-law."

Presently, Acton allows amateur radio towers by right if their height does not exceed the standard limits for buildings and structures – 36 to 40 feet depending on zoning district. A recent Massachusetts Superior Court decision (*Chedester v. Town of Whately*, November 24, 2004) held that Whately's 35-foot standard height limit is inconsistent with Federal Code and State Law, overruled the Whately Board of Appeals, and ordered the Town of Whately to issue a building permit for a 140-foot high tower.

This article proposes an overall height limit of 80 feet. This accommodates most commercially available amateur radio towers, and is adequate for reasonably efficient amateur radio operations in Acton's moderate topography.

Direct inquiries to: Roland Bartl, Town Planner – (978) 264-9636  
Selectman assigned: – E-mail: [bos@acton-ma.gov](mailto:bos@acton-ma.gov)

**Board of Selectmen:**  
**Finance Committee:**  
**Planning Board:**